

Installation Instructions for SAVANNA MODELING SYSTEM (SMS)

I. Directory structure

A. The directory (folder) structure is flexible. In general, there are two recommended structures. One needs to create the folder structure before installing.

B. Structure 1.

\savanna

\savanna\sites

\savanna\sites\sitename (Substitute a name for your site in "sitename")

\savanna\bin

\savanna\src

C. Structure 2

\projects

\projects\sitename

\savanna\bin

\savanna\src

C. The working directory will be sitename. The source code will be in src, and the executables will be in bin.

D. The pathnames corresponding to the directory structure used are all given on the file sypaths.dat, which will have copies in the bin directory, the site directory, and possibly the parm directory. (See VII below).

II. Go to each directory and unzip the files as follows. The zip files contain subdirectories which will be created when unzipped.

(if using the DOS version of PKUNZIP, use the -d option on pkunzip. eg. "pkunzip site.zip -d").

A. in the sites\sitename directory, pkunzip the site.zip file (the zip file maybe called something slightly different, such as ynpsite.zip, etc.)

B. in the bin directory, pkunzip the bin.zip file (or whatever it is called)

C. in the src directory, pkunzip the src.zip file (or whatever it is called)

III. After installing the program and data files, a program group or submenu, and programs within it must be created as follows. (This step is optional. It is only to create icons on your desktop. The SMS can be started by using RUN in the toolbar, and the model can be run from a DOS prompt, as described below).

A. Create a Savanna Program Group and add the SMS to it

1. Right click Start button, click Open

2. Double-click Programs folder

3. Click File menu, point and click on New

4. Click on the new folder, type name want to use for the submenu (in the box) (eg. "Savanna"), Press Enter

5. Double-click the folder just created

6. On the file menu, point to New,

7. then click Shortcut (which gets into Shortcut Wizard)
8. Use the Create Shortcut wizard to add items to submenu
 - a. use browse, go to \savanna\bin
 - b. click on program (eg. sms.exe)
 - c. click on Next
 - d. select a name for the shortcut (eg. "Savanna Modeling System")
 - e. Click Finish
- B. Add the SAVANNA model to the Savanna Program group
 1. Right click Start button, click Open
 2. Double-click Programs folder
 3. Double-click the Savanna Program group icon
 4. Click Files, point and click on New
 5. Repeat steps 7 and 8 from A) above, only adding \savanna\bin\savanna.exe
- C. To change a program icon: click on program icon, select File, select Properties, select Shortcut tab, select Change Icon button.
- D. Change the start-up directory. This is important, because when the program is started, it will look for the settings.dat and svpaths.dat files in that directory, the latter which in turn specify the paths of the model data. Click start button, Open, Programs, Savanna, the program (eg. SMS), File, Properties, Shortcut. Then change the Start In pathname to c:\savanna\bin. Note, there are two copies of svpaths.dat generated automatically when Settings/Pathnames are changed in the main SMS. The one in the \bin directory is used by the programs when they are started from Windows Icons. The one in the site directory is used when using the batch file startups.

IV. Initialization File (interact.ini)

A. The SMS needs to have access to an initialization file called interact.ini. A copy of the interact.ini file must be located in the directory from which the SMS is started (ie the bin or site directory).

The initialization file specifies the size of the SMS Window at start-up, in pixels.

The SMS must also know the pathnames where to look for certain files that define input forms (*.ifd) and graphics character sets (*.chr). These can be specified on the initialization file using the formdir= and chardir= settings.

1) Approach 1 (preferred). Make sure a copy of the file "interact.ini" is located both in the \bin directory and in the site directory. The one in \bin is used when starting from icons, or when SMS starts a subsystem. The one in the site directory is used when the batch files are used for start up from a DOS prompt.

2) Approach 2. Set the OS environment variable intinit (eg. Set initint=c:\savanna\bin\interact.ini). It can be set automatically by adding the set command to autoexec.bat (if running from DOS window), or to the Registry in Windows. Add the line in set_sms.bat to the autoexec.bat file, or run set_sms.bat by itself before using the SMS. The pathname may have to be changed for the appropriate hard drive (c: or d: etc.).

V. The winver.dat file.

A. Go to the \savanna\bin directory. Run “ver>winver.dat” to create a file called “winver.dat” which is used by the SMS to determine what version of Windows is being used.

VI. The runtime error message file.

A. If Lahey F90 was used to compile the model or SMS, a file called LF90.eer must be located in the directory from which the model is run, in order to decipher runtime errors. This is a file that comes with the Fortran compiler.

VII. To run from a DOS or Command Prompt

A. Open a DOS/Command Prompt window and cd to either the bin or site directory.

B. There should be batch files in the directory called

run.bat - run the model

sms.bat - start the SMS

C. The batch (*.bat) files can be created or edited with a text editor

VI. The site directory

A. The suggested organization of the site working directory (eg. \savanna\sites\sitename) the following subdirectories.

1. sitename\backparm - backup parameter files

2. sitename\parms - working parameter files

3. sitename\map100, sitename\map1000 etc.

- GIS data files at 100m, 1000m resolution, for example

4. sitename\output - where output files are written

5. sitename\graph - template and other files for the graph program

6. sitename\gisout - where img2gis program writes gis output files to

VII. The svpaths.dat file.

A. The svpaths.dat is read with SMS starts up. It contains the pathnames for the SMS and the model itself, a copy must be located in the site directory AND in savanna\bin (or in whatever directory the SMS is started from).